t 2/5/all

DIALOG(R) File 347: JAPIO

(c) JPO & JAPIO. All rts. reserv.

02621266

APPL. NO.:

1.4

ORGANIC ELECTRONIC ELEMENT MATERIAL

PUB. NO.: 63-238166 [JP 63238166 A]
PUBLISHED: October 04, 1988 (19881004)

INVENTOR(s): ISODA SATORU

KAMIYAMA TOMOTSUGU KAWAKUBO HIROAKI

APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or

Corporation), JP (Japan) 62-073347 [JP 8773347]

FILED: March 26, 1987 (19870326)
INTL CLASS: [4] CO8L-101/00; C08G-061/10; C08G-061/12; H01L-029/28

JAPIO CLASS: 14.2 (ORGANIC CHEMISTRY -- High Polymer Molecular Compounds);

42.2 (ELECTRONICS -- Solid State Components)

JOURNAL: Section: C, Section No. 563, Vol. 13, No. 39, Pg. 132,

January 27, 1989 (19890127)

ABSTRACT

PURPOSE: To obtain an organic electronic element material having anisotropy of electrical conduction controllable at molecular level, by using a functional molecule containing a functional group having electron-transmission ability in the molecule and transmitting electron between the functional groups according to a quantum mechanical tunneling mechanism.

CONSTITUTION: The objective organic electronic element substance is composed of a functional molecule containing plural functional composed of a functional molecule containing plural functional groups having electron transmission ability in the molecule and disposed in a manner that electron can be transmitted between the functional groups or composed of plural number of functional molecules each having one functional group and disposing the compounds in a manner that electron can be transmitted between said functional groups. The functional group is an oxidation-reduction substance selected from porphyrin derivatives, phthalocyanine derivatives, isoalloxazine derivatives, viologens and organometallic complexes. The skeleton of the functional molecule is a polymeric compound, a fatty acid or a cyclic organic compound.